AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-25 (canceled)

Claim 26 (previously presented) The system of claim 62, wherein the determining means comprises:

- a) a first summing means for summing the quantities of objects to be transacted by all bidders at the current price;
- b) a first comparing means, coupled to the first summing means, for comparing the summed quantity of objects to be transacted at the current price with the current quantity of available objects;
- c) a first assigning means, coupled to the comparing means, for assigning objects to a bidder based on the bids of the other bidders and decreasing the current quantity of objects available, if the summed quantity of objects to be transacted at the current price is greater than the current quantity of available objects; and
- d) a second assigning means, coupled to the comparing means, for assigning to each bidder a quantity of objects corresponding to each bidder's respective bid, if the summed quantity of objects to be transacted at the current price is not greater than the current quantity of available objects.

Claim 27 (previously presented) The system of claim 26, wherein the first assigning means comprises:

a) means for selecting for consideration a bidder not yet considered;

- b) a second summing means, coupled to the selecting means, for summing the quantities to be transacted by all bidders other than the bidder being considered;
- c) a second comparing means, coupled to the second summing means, for comparing the quantity to be transacted by all bidders other than the bidder being considered with the current quantity of available objects; and
- d) a third assigning means, coupled to the comparing means, for assigning the objects in excess of those to be transacted by all bidders other than the bidder being considered to the bidder being considered and subtracting those objects from the current quantity of available objects, if the quantity to be transacted by all bidders other than the bidder being considered is less than the current quantity of available objects.

Claim 28 (previously presented) The system of Claim 62, wherein each bid entered by a bidder is limited by the immediately preceding bid entered by that bidder.

Claim 29 (previously presented) The system of Claim 62, wherein the updated bidding information includes all bids received at the bidding information processor at the current price and a bid entry terminal comprises means for displaying all such bids.

Claim 30 (previously presented) The system of Claim 62, wherein the means for generating updated bidding information comprises means for receiving an updated current price specified by an auctioneer.

Claims 31-42 (canceled)

Claim 43 (currently amended) The system of claim 63, wherein the <u>second</u> determining steps means comprises the steps of:

- a) a first summing means for summing the quantities of objects to be transacted by all bidders at the current price;
- b) a first comparing means, coupled to the first summing means, for comparing the summed quantity of objects to be transacted in the current round with the current quantity of available objects;
- c) a first assigning means, coupled to the comparing means, for assigning objects to a bidder based on the bids of the other bidders and decreasing the current quantity of objects available, if the summed quantity of objects to be transacted in the current round is greater than the current quantity of available objects; and
- d) a second assigning means, coupled to the comparing means, for assigning to each bidder a quantity of objects corresponding to each bidder's respective bid, if the summed quantity of objects to be transacted in the current round is not greater than the current quantity of available objects.

Claim 44 (previously presented) The system of claim 63, wherein a number of objects on which a bidder is allowed to bid must not be larger than a number of objects on which the bidder was allowed to bid in an immediately preceding round.

Claim 45 (previously presented) The method of claim 63, wherein a bid comprises an indication of a quantity of objects and a price associated with the quantity of objects.

Claim 46 (previously presented) The method of claim 63, wherein a bid comprises a list of specific objects and a price associated with each object in the list.



Claim 47 (previously presented) In a system including a plurality of bid entry terminals operated by bidders, and a bidding information processor, the bidding information processor being communicatively coupled to bid entry terminals, a method for conducting an automated auction for multiple objects in multiple rounds, the auction allowing assignment of objects at different prices, the method comprising the steps of:

- a) transmitting a signal representing current bidding information from the bidding information processor to a plurality of bid entry terminals, the current bidding information including at least an indicator of a current price;
- b) receiving bids from participating bidders at the bid entry terminals, each bid representing at least a quantity of the objects the bidder wishes to transact;
- c) transmitting a signal representing a bid from each bid entry terminal which received a bid;
- d) determining separately, for each of a plurality of bidders, a quantity of the objects, if any, to be assigned in the current round, and in the event of such a determined quantity, assigning the determined quantity to the determined bidder; and
- e) generating updated bidding information and initiating at least one more round of bidding if any objects remain unassigned.

Claim 48 (previously presented). A method as recited in claim 47 wherein the assignment in step d) occurs at a price related to the round in which the assignment occurs.

Claim 49 (previously presented). A method as recited in claim 47 wherein the determining in step d) occurs at the price of the round in which the assignment occurs.

Claim 50 (previously presented) A method as in claim 47 wherein the determining in step d) is effected for each bidder who submitted a bid in the round.

Claim 51 (previously presented) The method of claim 47, wherein the determining step comprises the steps of:

Docket No.: 21736-00012-US

a) summing the quantities to be transacted by all bidders to determine a total quantity of objects to be transacted at the current price;

- b) if the total quantity of objects to be transacted at the current price is greater than the current quantity of available objects, assigning objects to a bidder based on the bids of other bidders and decreasing the current quantity of objects available in accordance with the assigning;
- c) If the total quantity of objects to be transacted at the current price is not greater than the current quantity of available objects, assigning to each bidder a quantity of objects corresponding to each bidder's respective bid.

Claim 52 (previously presented) The method of claim 47 wherein the determining step comprises the steps of:

- selecting for consideration a bidder not yet considered;
- b) summing the quantities to be transacted by all bidders other than the bidder being considered;
- c) If the sum of quantities to be transacted by all bidders other than the bidder being considered is less than the current quantity of available objects, assigning the objects within the bid and in excess of those to be transacted by all bidders other than the bidder being considered, to the bidder being considered and subtracting those objects from the current quantity of available objects.
 - d) repeating steps a-c for each participating bidder.

Claim 53 (previously presented) the method of claim 47, further including the step of limiting each bid entered by a bidder by the immediately preceding bid entered by that bidder.

Claim 54 (previously presented) The method of claim 47, wherein the updated bidding information includes all bids received at the bidding information processor at the current price and further comprising the step of displaying all bids on all bid entry terminals.

Docket No.: 21736-00012-US

Claim 55 (previously presented) The method of claim 47, wherein the updated bidding information includes a sum of bids received at the bidding information processor and further comprising the step of displaying the sum.

Claim 56 (previously presented) In a system including a plurality of bid entry terminals operated by bidders, and a bidding information processor, the bidding information processor being communicatively coupled to bid entry terminals, a method for conducting an automated auction for multiple objects in multiple rounds, the auction allowing assignment or objects at different prices, the method comprising the steps of:

- a) transmitting a signal representing current bidding information from the bidding information processor to a plurality of the bid entry terminals;
- b) allowing participating bidders to enter bids at bid entry terminals, a bid indicating at least an object, or a quantity of objects, and an associated price,
- c) transmitting a signal representing a bid from a bid entry terminal which received a bid;
- d) determining separately, for each of a plurality of bidders, a quantity of objects, if any, to be assigned to the bidder in the current round, and in the event of such a determined quantity, assigning the determined quantity to the determined bidder;
- e) generating updated bidding information at the bidding information processor; and
- f) initiating at least one additional round of bidding if at least one object remains unassigned.

Claim 57 (previously presented) A method in claim 56 wherein the assigning occurs at the associated price.

Claim 58 (previously presented) The method of Claim 56 wherein the determining step comprises the steps of:

- selecting for consideration a bidder not yet considered;
- b) summing the quantities to be transacted by all bidders other than the bidder being considered;

Docket No.: 21736-00012-US

- c) if the sum of quantities to be transacted by all bidders other than the bidder being considered is less than the current quantity of available objects, assigning the objects within the bid and in excess of those to be transacted by all bidders other than the bidder being considered, to the bidder being considered and subtracting those objects from the current quantity of available objects;
 - d) repeating steps a-c for each participating bidder.

Claim 59 (previously presented) The method of claim 56 wherein the number of objects on which a bidder is allowed to bid is not larger than the number of objects on which the bidder actually bid in an immediately preceding round.

Claim 60 (previously presented) The method of claim 56 wherein a bid comprises an indication of a quantity of objects and a price associated with the quantity of objects.

Claim 61 (previously presented) The method of claim 56 wherein a bid comprises a list of specific objects and a price associated with each object in the list.

Claim 62 (currently amended) A system for conducting an automated auction for multiple objects in multiple rounds, the auction allowing assignment of objects at different prices, the system comprising:

a plurality of bid entry terminals operated by bidders;

a bidding information processor, the bidding information processor being communicatively coupled to the bid entry terminals and comprising:

means for generating current bidding information, the current bidding information including at least an indicator of a current price,

means, coupled to the generating means, for transmitting a signal representing current bidding information from the bidding information processor to bid entry terminals,

means for receiving bids from the bid entry terminals, and

means for determining, separately for each of a plurality of bidders, a quantity of objects, if any, to be assigned in the current round;

Ŷ

Docket No.: 21736-00012-US

means assigning the determined quantity of objects to the determined bidder in the current round;

each bid entry terminal comprising:

means for receiving a bid from a participating bidder, the bid indicating a quantity of objects to be transacted,

means, coupled to the bid receiving means, for transmitting a signal representing the bid to the bidding information processor, and

means for receiving current bidding information from the bidding information processor.

Claim 63 (currently amended) A system for conducting an automated auction for multiple objects in multiple rounds, the auction allowing assignment of objects at different prices, the system comprising:

a plurality of bid entry terminals, the bid entry terminals operated by bidders;

a bidding information processor, the bidding information processor being communicatively coupled to the bid entry terminals and comprising:

means for generating current bidding information including at least the current price associated with at least one object,

means, coupled to the generating means, for transmitting a signal representing current bidding information from the bidding information processor to the bid entry terminals,

means for receiving bids from the bid entry terminals, and

means for determining, separately for a plurality of bidders, a quantity of objects, if any, to be assigned in the current round;

means assigning the determined quantity of objects to the determined bidder at the price for the round;

each bid entry terminal comprising:

means for receiving a bid from a participating bidder, the bid indicating at least an object, or a quantity of objects to be transacted, and an associated price,

means, coupled to the bid receiving means, for transmitting a signal representing the bid to the bidding information processor, and



processor.

Docket No.: 21736-00012-US

M

means for receiving current bidding information from the bidding information

Claim 64 (previously presented) The method of claim 47 wherein a bid received from a bidder comprises a transaction curve.

Claim 65 (previously presented) The method of claim 64 wherein the transaction curve comprises a demand curve.

Claim 66 (previously presented) The method of claim 64 wherein the transaction curve comprises a supply curve.

Claim 67 (previously presented) In a system including a plurality of bid entry terminals operated by bidders, and a bidding information processor, the bidding information processor being communicatively coupled to bid entry terminals, a method for conducting an automated auction for multiple objects in multiple rounds, the auction allowing assignment of objects at different prices, the method comprising:

- a) receiving bids from participating bidders at the bid entry terminals, each bid representing at least a quantity of the objects the bidder wishes to transact;
- b) transmitting a signal representing a bid from each bid entry terminal which received a bid to the bidding information processor;
- c) determining separately, for each of a plurality of bidders, a quantity of the objects, if any, to be assigned in the current round, and in the event of such a determined quantity, assigning the determined quantity to the determined bidder, said determining comprising:
 - c1) summing the quantities to be transacted by all bidders other than the bidder being considered;
 - c2) if the sum of quantities to be transacted by all bidders other than the bidder being considered is less than the current quantity of available objects, assigning the objects within the bid and in excess of those to be transacted by all bidders

Docket No.: 21736-00012-US

other than the bidder being considered to the bidder being considered and subtracting those objects from the current quantity of available objects; and

d) initiating at least one more round of bidding if any objects remain unassigned.

Claim 68 (previously presented) A method as recited in claim 67 which includes, prior to receiving bids, transmitting a signal representing current bidding information from the bidding information processor to a plurality of bid entry terminals, the current bidding information including at least an indicator of a current price.

Claim 69 (previously presented) A method as recited in claim 67 in which the assignment occurs at a price related to the round in which the assignment occurs.

Claim 70 (previously presented) A method as recited in claim 67, in which the assignment occurs at the price of the round in which the assignment occurs.

Claims 71-75 (canceled)

Claim 76 (currently amended) A method for using a computer to implement an auction of a plurality of objects, two or more bidders participating in the auction, the auction allowing assignment of objects to one or more of the bidders at different prices, the method comprising:

- a) inputting, into the computer, bids from participating bidders,
- b) determining at the computer, based on the bids of step a), whether there is at least one object which is desired by only one bidder and, if so, assigning the determined object or objects to the determined bidder,
- c) inputting, into the computer, subsequent to a prior determining step, bids from participating bidders,
- d) determining at the computer, subsequent to the inputting of step e) and based on bids from participating bidders input in step c), whether there is at least one object which is desired by



Docket No.: 21736-00012-US

only one bidder and, if so, assigning the determined object or objects to the determined bidder, and

e) repetitively performing steps c) and d), if any objects remain available.

Claim 77 (previously presented) A method as recited in claim 76 wherein, prior to step a), participating bidders receive information concerning numbers of available objects and prices.

Claim 78 (previously presented) A method as recited in claim 77 wherein, prior to steps a) and c), participating bidders receive information concerning numbers of available objects and prices, and wherein the bids of steps a) and c) represent quantities of objects.

Claim 79 (previously presented) A method as recited in claim 78 wherein a determining step includes summing quantities from bids from all but one bidder to produce a first sum and comparing the first sum with a number of available objects.

Claim 80 (previously presented) A method as recited in claim 79 wherein a determining step also includes, in the event the first sum is less than the number of available objects with which it is compared, assigning to the one bidder a number of objects equal to a difference between said number of available objects and said first sum.

Claim 81 (previously presented) A method as recited in claim 80 wherein an assigned object is assigned at a most recent price.

Claim 82 (previously presented) A method as recited in claim 79 wherein a determining step also includes summing quantities from bids of all but another bidder to produce another sum and comparing the another sum with a number of available objects.

Claim 83 (previously presented). A method as recited in claim 76 wherein the inputting includes:

al) providing a participating bidder with a terminal,

12

Docket No.: 21736-00012-US

a2) receiving bid information at the terminal from a participating bidder, and

a3) sending bids to the computer based on the received bid information.

Claim 84 (previously presented) A method as recited in claim 83 which also includes:

f) sending information relating to the determination of step b) to one or more terminals associated with participating bidders, and

g) sending information relating to the determination of step d) to one or more terminals associated with participating bidders.

Claim 85 (previously presented) A method as recited in claim 84 wherein step g) further includes providing information to terminals of participating bidders indicating whether the auction has terminated.

Claim 86 (previously presented) A method as recited in claim 76 wherein the determining steps are associated with information on prices and numbers of available objects.

Claim 87 (previously presented) A method as recited in claim 76 wherein bids comprise quantities of objects.

Claim 88 (previously presented) A method as recited in claim 86 wherein bids comprise quantities of objects.

Claim 89 (previously presented) A method as recited in claim 88 wherein a determining step includes summing quantities from bids from all but one bidder to produce a first sum and comparing the first sum with a number of available objects.

Claim 90 (previously presented) A method as recited in claim 89 wherein a determining step also includes, in the event the first sum is less than the number of available objects with which it is compared, assigning to the one bidder a number of objects equal to a difference between said number of available objects and said first sum.



Claim 91 (previously presented) A method as recited in claim 90 wherein an assigned object is assigned at an associated price.

Claim 92 (previously presented) A computer system for implementing an auction of a plurality of objects, two or more bidders participating in the auction, the auction allowing assignment of objects to one or more of the bidders at different prices, the computer system comprising:

- a) input means for receiving bids from participating bidders,
- b) first determining means for determining whether there is at least one object which is desired by only one bidder based on the bids detected by the input means and for assigning the determined object or objects to the determined bidder,
- c) second input means for receiving bids from participating bidders effective after operation of the first determining means,
- d) second determining means for determining whether there is at least one object which is desired by only one bidder based on bids detected by the second input means and for assigning the determined object or objects to the determined bidder, and
- e) control means to maintain operation of the second input and second determining means so long as objects remain unassigned.

Claim 93 (previously presented) A computer system as recited in claim 92 which further includes communication means conveying to bidders information concerning numbers of available objects and prices.

Claim 94 (previously presented) A computer system as recited in claim 93 wherein the communication means conveys information concerning numbers of available objects and prices, and wherein the first and second input means receive bids including information related to quantities of objects.

Claim 95 (previously presented) A computer system as recited in claim 94 wherein said first and second determining means includes an adder operating on quantities from

Docket No.: 21736-00012-US

bids from all but one bidder to produce a first sum and a comparator for comparing the first sum with a number of available objects.

Claim 96 (previously presented) A computer system as recited in claim 95 wherein the first and second determining means also includes assigning means for assigning to the one bidder a number of objects equal to a difference between said number of available objects and said first sum.

Claim 97 (previously presented) A computer system as recited in claim 96 wherein the determining means assigns objects at a most recent price.

Claim 98 (previously presented) A method as recited in claim 96 wherein the first and second determining means also includes an adder for adding quantities from bids of all but another bidder to produce another sum and a comparator for comparing the another sum with a number of available objects.

Claim 99 (previously presented) A computer system as recited in claim 92 which further includes:

- al) a terminal related to a participating bidder, the terminal including
- a2) a receiver for receiving bid information from a participating bidder, and
- a3) a transmitter sending bids from the terminal.

Claim 100 (previously presented) A computer system as recited in claim 99 which further includes means for reporting to bidders information relating to the operation of the first and second determination means.

Claim 101 (previously presented) A computer system as recited in claim 100 wherein said means for reporting also includes means for reporting to bidders that the auction has terminated.

Docket No.: 21736-00012-US

Claim 102 (previously presented) A computer system as recited in claim 92 wherein the first and second determining means take account of prices and numbers of available objects.

Claim 103 (previously presented) A computer system as recited in claim 92 wherein the first and second input means receive bids which comprise quantities of objects.

Claim 104 (previously presented) A computer system as recited in claim 102 wherein the first and second input means receive bids which comprise quantities of objects.

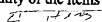
Claim 105 (previously presented) A computer system as recited in claim 104 wherein said first and second determining means includes an adder operating on quantities from bids from all but one bidder to produce a first sum and a comparator for comparing the first sum with a number of available objects.

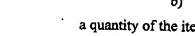
Claim 106 (previously presented) A computer system as recited in claim 105 wherein the first and second determining means also includes assigning means for assigning to the one bidder a number of objects equal to a difference between said number of available objects and said first sum.

Claim 107 (previously presented) A computer system as recited in claim 106 wherein the determining means assigns objects at a most recent price.

Claim 108 (new) A method for using at least one computer to implement an auction of a plurality of items, the auction allowing submission of bids on the items at a plurality of times and allowing assignment of the items at different prices, the method comprising:

- transmitting from a computer a signal representing current information a) regarding the bidding process;
- receiving bids submitted by a plurality of bidders, a bid indicating at least a quantity of the items that a bidder wishes to transact;





Docket No.: 21736-00012-US

determining at a computer, for each of a plurality of bidders, a quantity of c) the items, if any, to be assigned at the current time, and in the event of such a determined quantity, assigning the determined quantity to the determined bidder;

- generating at a computer updated information regarding the bidding process; and
- initiating at a computer at least one additional opportunity for bidders to e) submit bids if any items remain unassigned.

Claim 109 (new) The method of claim 108 wherein the current information regarding the bidding process includes an indicator of a current price.

Claim 110 (new) The method of claim 109 wherein the assigning of the determined quantity occurs at a price related to the current price.

Claim 111 (new) The method of claim 109 wherein the assigning of the determined quantity occurs at the current price.

Claim 112 (new) The method of claim 109 wherein the determining is effected for each bidder who submitted a bid at the current price.

Claim 113 (new) The method of claim 108 wherein the determining comprises the steps of:

- summing the quantities to be transacted by all bidders at the current time a) to determine a total quantity of items to be transacted at the current time;
- if the total quantity of items to be transacted at the current time is greater b) than the current quantity of available items, assigning items to a bidder based on the bids of other bidders and decreasing the current quantity of items available in accordance with the assigning;
- if the total quantity of items to be transacted at the current time is not greater than the current quantity of available items, assigning to each bidder a quantity of items corresponding to each bidder's respective bid.

Docket No.: 21736-00012-US

Claim 114 (new) The method of claim 108 wherein the determining comprises the steps of:

- selecting for consideration a bidder not yet considered;
- b) summing the quantities to be transacted by all bidders other than the bidder being considered;
- c) calculating a quantity of items to be assigned to the bidder being considered, equaling the quantity of available items minus the sum of quantities to be transacted by all bidders other than the bidder being considered, if the sum of quantities to be transacted by all bidders other than the bidder being considered is less than the quantity of available items, and equaling zero otherwise;
- d) assigning the quantity of items calculated in step c), within the bid of the bidder being considered and not previously assigned to the bidder being considered, to the bidder being considered; and
 - e) repeating steps a) d) for each bidder.

Claim 115 (new) The method of claim 109 wherein the determining comprises the steps of:

- a) selecting for consideration a bidder not yet considered;
- b) summing the quantities to be transacted at the current price by all bidders other than the bidder being considered;
- c) calculating a quantity of items to be assigned to the bidder being considered, equaling the quantity of available items minus the sum of quantities to be transacted at the current price by all bidders other than the bidder being considered, if the sum of quantities to be transacted at the current price by all bidders other than the bidder being considered is less than the quantity of available items, and equaling zero otherwise;
- d) assigning the quantity of items calculated in step c), within the bid of the bidder being considered and not previously assigned to the bidder being considered, to the bidder being considered at the current price; and
 - e) repeating steps a) d) for each bidder.



Docket No.: 21736-00012-US

Claim 116 (new) The method of claim 108 further including the step of limiting each bid of a bidder by the immediately preceding bid of the bidder.

Claim 117 (new) The method of claim 109 further including the step of limiting each bid of a bidder by the immediately preceding bid of the bidder.

Claim 118 (new) The method of claim 117 wherein the limitation on each bid is that the quantity to be transacted at the current price must be no greater than the quantity to be transacted by the bidder at the immediately preceding price.

Claim 119 (new) The method of claim 108 wherein the updated information regarding the bidding process includes all quantities to be transacted at the current time.

Claim 120 (new) The method of claim 109 wherein the updated information regarding the bidding process includes all quantities to be transacted at the current price.

Claim 121 (new) The method of claim 108 wherein the updated information regarding the bidding process includes a sum of quantities to be transacted at the current time.

Claim 122 (new) The method of claim 109 wherein the updated information regarding the bidding process includes a sum of quantities to be transacted at the current price.

Claim 123 (new) The method of claim 108 wherein a bid indicates quantities of items that a bidder wishes to transact at two or more prices.

Claim 124 (new) The method of claim 109 wherein a bid indicates quantities of items that a bidder wishes to transact at two or more current prices.

Claim 125 (new) A method for using at least one computer to implement an auction of a plurality of objects, the auction allowing submission of bids on the objects at a plurality of times and allowing assignment of objects at different prices, the method comprising:

19

Dy

Application No.: 09/397,008

a) transmitting from a computer a signal representing current information regarding the bidding process;

- b) receiving bids submitted by a plurality of bidders, each bid indicating at least an object or a quantity of objects, and an associated price;
- c) determining at a computer, for each of a plurality of bidders, objects or a quantity of objects, if any, to be assigned to the bidder at the current time, and in the event of such determined objects or quantity of objects, assigning the determined objects or quantity of objects to the determined bidder;
- d) generating updated information regarding the bidding process at a computer; and
- e) initiating at a computer at least one additional opportunity for the submission of bids if at least one object remains unassigned.

Claim 126 (new) The method of claim 125 wherein the assigning of objects or a quantity of objects occurs at the associated price.

Claim 127 (new) The method of claim 125 wherein the determining comprises the steps of:

- selecting for consideration a bidder not yet considered;
- b) summing the quantities to be transacted by all bidders other than the bidder being considered;
- c) calculating a quantity of objects to be assigned to the bidder being considered, equaling the quantity of available objects minus the sum of quantities to be transacted by all bidders other than the bidder being considered, if the sum of quantities to be transacted by all bidders other than the bidder being considered is less than the quantity of available objects, and equaling zero otherwise;
- d) assigning the quantity of objects calculated in step c), within the bid of the bidder being considered and not previously assigned to the bidder being considered, to the bidder being considered; and
 - e) repeating steps a) d) for each bidder.

DH

.

Docket No.: 21736-00012-US

Claim 128 (new) The method of claim 125 wherein the current information regarding the bidding process includes a minimum price that may be submitted in a bid.

Claim 129 (new) The method of claim 125 wherein the current information regarding the bidding process includes a maximum price that may be submitted in a bid.

Claim 130 (new) The method of claim 125 wherein the number of objects on which a bidder is allowed to bid is not greater than the number of objects on which the bidder bid in an immediately preceding round.

Claim 131 (new) The method of claim 125 wherein a bid comprises a list of specific objects and a price associated with each object in the list.

Claim 132 (new) The method of claim 125 wherein a bid comprises an indication of a quantity of objects and a price associated with the quantity of objects.

Claim 133 (new) The method of claim 125 wherein a bid indicates the quantity of objects that a bidder wishes to transact at two or more prices.

Claim 134 (new) A system comprising at least one computer for implementing an auction of a plurality of items, the auction allowing submission of bids on the items at a plurality of times and allowing assignment of the items at different prices, the system comprising:

- a) transmitting means for transmitting a signal representing current information regarding the bidding process to a plurality of bidders;
- b) receiving means for receiving bids submitted by a plurality of bidders, a bid indicating at least a quantity of the items that a bidder wishes to transact;
- c) determining means for determining, for each of a plurality of bidders, a quantity of the items, if any, to be assigned at the current time, and in the event of such a determined quantity, assigning the determined quantity to the determined bidder;
- d) generating means for generating updated information regarding the bidding process; and

21



Application No.: 09/397,008

e) initiating means for initiating at least one additional opportunity for bidders to submit bids if any items remain unassigned.

Claim 135 (new) The system of claim 134 wherein the current information regarding the bidding process includes an indicator of a current price.

Claim 136 (new) The system of claim 135 wherein the determining means assigns the determined quantity at a price related to the current price.

Claim 137 (new) The system of claim 135 wherein the determining means assigns the determined quantity at the current price.

Claim 138 (new) The system of claim 135 wherein the determining means is applied to each bidder who submitted a bid at the current price.

Claim 139 (new) The system of claim 134 wherein the determining means comprises:

- a) summing means for summing the quantities to be transacted by all bidders at the current time;
- b) comparing means, coupled to the summing means, for comparing the summed quantity of items to be transacted at the current time with the current quantity of available items;
- c) first assigning means, coupled to the comparing means, for assigning items to a bidder based on the bids of other bidders and decreasing the current quantity of items available in accordance with the assigning, if the summed quantity of items to be transacted at the current time is greater than the current quantity of available items; and
- d) second assigning means, coupled to the comparing means, for assigning to each bidder a quantity of items corresponding to each bidder's respective bid, if the summed quantity of items to be transacted at the current time is not greater than the current quantity of available items.



Application No.: 09/397,008 Docket No.: 21736-00012-US

Claim 140 (new) The system of claim 134 wherein the determining means comprises:

- a) selecting means for selecting for consideration a bidder not yet considered;
- b) summing means, coupled to the selecting means, for summing the quantities to be transacted by all bidders other than the bidder being considered;
- c) calculating means, coupled to the summing means, for calculating a quantity of items to be assigned to the bidder being considered, equaling the quantity of available items minus the summed quantities to be transacted by all bidders other than the bidder being considered, if the summed quantities to be transacted by all bidders other than the bidder being considered is less than the quantity of available items, and zero otherwise; and
- d) assigning means, coupled to the calculating means, for assigning the quantity of items calculated by the calculating means, within the bid of the bidder being considered and not previously assigned to the bidder being considered, to the bidder being considered.

Claim 141 (new) The system of claim 135 wherein the determining comprises the steps of:

- selecting means for selecting for consideration a bidder not yet considered;
- b) summing means, coupled to the selecting means, for summing the quantities to be transacted at the current price by all bidders other than the bidder being considered:
- c) calculating means, coupled to the summing means, for calculating a quantity of items to be assigned to the bidder being considered, equaling the quantity of available items minus the summed quantities to be transacted at the current price by all bidders other than the bidder being considered, if the summed quantities to be transacted at the current price by all bidders other than the bidder being considered is less than the quantity of available items, and zero otherwise; and
- d) assigning means, coupled to the calculating means, for assigning the quantity of items calculated by the calculating means, within the bid of the bidder being considered and not previously assigned to the bidder being considered, to the bidder being considered at the current price.

Λ/

23

Docket No.: 21736-00012-US

Claim 142 (new) The system of claim 134 further including limiting means for limiting each bid of a bidder by the immediately preceding bid of the bidder.

Claim 143 (new) The system of claim 135 further includes limiting means for limiting each bid of a bidder by the immediately preceding bid of the bidder.

Claim 144 (new) The system of claim 143 wherein the limiting means limits the quantity to be transacted at the current price to be no greater than the quantity to be transacted by the bidder at the immediately preceding price.

Claim 145 (new) The system of claim 134 wherein the updated information regarding the bidding process includes all quantities to be transacted at the current time.

Claim 146 (new) The system of claim 135 wherein the updated information regarding the bidding process includes all quantities to be transacted at the current price.

Claim 147 (new) The system of claim 134 wherein the updated information regarding the bidding process includes a sum of quantities to be transacted at the current time.

Claim 148 (new) The system of claim 135 wherein the updated information regarding the bidding process includes a sum of quantities to be transacted at the current price.

Claim 149 (new) The system of claim 134 wherein a bid indicates quantities of items that a bidder wishes to transact at two or more prices.

Claim 150 (new) The system of claim 135 wherein a bid indicates quantities of items that a bidder wishes to transact at two or more current prices.

Claim 151 (new) A system comprising at least one computer for implementing an auction of a plurality of objects, the auction allowing submission of bids on the objects at a 24

COMMOLLY BOVE LODGE &HUTZ

Application No.: 09/397,008 Docket No.: 21736-00012-US

plurality of times and allowing assignment of the objects at different prices, the system comprising:

- a) transmitting means for transmitting a signal representing current information regarding the bidding process to a plurality of bidders;
- b) receiving means for receiving bids submitted by a plurality of bidders,
 each bid indicating at least an object or a quantity of objects, and an associated price;
- c) determining means for determining, for each of a plurality of bidders, objects or a quantity of objects, if any, to be assigned to the bidder at the current time, and in the event of such determined objects or quantity of objects, assigning the determined objects or quantity of objects to the determined bidder;
- d) generating means for generating updated information regarding the bidding process; and
- e) initiating means for initiating at least one additional opportunity for bidders to submit bids if at least one object remains unassigned.

Claim 152 (new) The system of claim 151 wherein the determining means assigns objects or a quantity of objects at the associated price.

Claim 153 (new) The system of claim 151 wherein the determining means comprises:

- a) selecting means for selecting for consideration a bidder not yet considered;
- b) summing means, coupled to the selecting means, for summing the quantities to be transacted by all bidders other than the bidder being considered;
- c) calculating means, coupled to the summing means, for calculating a quantity of objects to be assigned to the bidder being considered, equaling the quantity of available objects minus the summed quantities to be transacted by all bidders other than the bidder being considered, if the summed quantities to be transacted by all bidders other than the bidder being considered is less than the quantity of available objects, and equaling zero otherwise; and
- d) assigning means, coupled to the calculating means, for assigning the quantity of objects calculated by the calculating means, within the bid of the bidder being



Docket No.: 21736-00012-US

considered and not previously assigned to the bidder being considered, to the bidder being considered.

Claim 154 (new) The system of claim 151 wherein the current information regarding the bidding process includes a minimum price that may be submitted in a bid.

Claim 155 (new) The system of claim 151 wherein the current information regarding the bidding process includes a maximum price that may be submitted in a bid.

Claim 156 (new) The system of claim 151 further including limiting means for limiting the number of objects on which a bidder is allowed to bid to be no greater than the number of objects on which the bidder bid in an immediately preceding round.

Claim 157 (new) The system of claim 151 wherein a bid comprises a list of specific objects and a price associated with each object in the list.

Claim 158 (new) The system of claim 151 wherein a bid comprises an indication of a quantity of objects and a price associated with the quantity of objects.

Claim 159 (new) The system of claim 151 wherein a bid indicates the quantity of objects that a bidder wishes to transact at two or more prices.

Claim 160 (new) A method for using at least one computer to implement an auction of a plurality of items, the auction allowing submission of bids on the items at a plurality of times, the method comprising:

- a) transmitting from a computer a signal representing information regarding the bidding process, said information including at least an indicator of a current price;
- b) receiving bids submitted by a plurality of bidders, each bid indicating at least a quantity of the items that a bidder wishes to transact at the current price;

Application No.: 09/397,008

c) constraining bids at a computer so that the quantity that a bidder wishes to transact at the current price can be no greater than the quantity that the bidder wished to transact at the immediately preceding price;

- d) determining at a computer whether the auction should end or continue, based on a comparison of a sum of quantities that bidders wish to transact at the current price and an available quantity of items;
- e) generating at a computer updated information regarding the bidding process; and
- f) initiating at a computer at least one additional opportunity for bidders to submit bids at a new price following a determination that the auction should continue.

Claim 161 (new) The method of claim 160 which further includes assigning quantities that bidders wish to transact, at prices related to the current price, to the respective bidders following a determination that the auction should end.

Claim 162 (new) The method of claim 160 which further includes assigning quantities that bidders wish to transact, at the current price, to the respective bidders following a determination that the auction should end.

Claim 163 (new) The method of claim 160 wherein the determining comprises the steps of:

- a) summing the quantities that all bidders wish to transact at the current price to determine a total quantity of items that bidders wish to transact at the current price;
- b) if the total quantity of items that bidders wish to transact at the current price is greater than the current quantity of available items, determining that the auction should continue; and
- c) if the total quantity of items that bidders wish to transact at the current price is not greater than the current quantity of available items, determining that the auction should end.



Application No.: 09/397,008

Claim 164 (new) The method of claim 160 wherein the updated information regarding the bidding process includes the disaggregated quantities that each bidder wishes to transact at the current price.

Claim 165 (new) The method of claim 160 wherein the updated information regarding the bidding process includes a sum of quantities that all bidders wish to transact at the current price.

Claim 166 (new) The method of claim 160 wherein a bid indicates quantities of items that a bidder wishes to transact at two or more prices.

Claim 167 (new) A system comprising at least one computer for implementing an auction of a plurality of items, the auction allowing submission of bids on the items at a plurality of times, the system comprising:

- a) transmitting means for transmitting a signal representing information
 regarding the bidding process, said information including at least an indicator of a current price;
- b) receiving means for receiving bids submitted by a plurality of bidders, each bid indicating at least a quantity of the items that a bidder wishes to transact at the current price;
- c) constraining means for constraining bids so that the quantity that a bidder wishes to transact at the current price can be no greater than the quantity that the bidder wished to transact at the immediately preceding price;
- d) determining means for determining whether the auction should end or continue, based on a comparison of a sum of quantities that bidders wish to transact at the current price and an available quantity of items;
- e) generating means for generating updated information regarding the bidding process; and
- f) initiating means for initiating at least one additional opportunity for bidders to submit bids at a new price following a determination that the auction should continue.



Application No.: 09/397,008

Claim 168 (new) The system of claim 167 which further includes assigning means for assigning quantities that bidders wish to transact, at prices related to the current price, to the respective bidders following a determination that the auction should end.

Claim 169 (new) The system of claim 167 which further includes assigning means for assigning quantities that bidders wish to transact, at the current price, to the respective bidders following a determination that the auction should end.

Claim 170 (new) The system of claim 167 wherein the determining means comprises:

- a) summing means for summing the quantities that all bidders wish to transact at the current price to determine a total quantity of items that bidders wish to transact at the current price;
- b) comparing means, coupled to the summing means, for comparing the total quantity of items that bidders wish to transact at the current price with the available quantity of items;
- c) second determining means, coupled to the comparing means, for determining that the auction should end if the total quantity of items that bidders wish to transact at the current price is no greater than the available quantity of items; and
- d) third determining means, coupled to the comparing means, for determining that the auction should continue if the total quantity of items that bidders wish to transact at the current price exceeds the available quantity of items.

Claim 171 (new) The system of claim 167 wherein the updated information regarding the bidding process includes the disaggregated quantities that each bidder wishes to transact at the current price.

Claim 172 (new) The system of claim 167 wherein the updated information regarding the bidding process includes a sum of quantities that all bidders wish to transact at the current price.



Application No.: 09/397,008

Claim 173 (new) The system of claim 167 wherein a bid indicates quantities of items that a bidder wishes to transact at two or more prices.

Claim 174 (new) A method for using at least one computer to implement an auction of a plurality of items, the auction allowing submission of bids on the items at a plurality of times, the method comprising:

- a) transmitting from a computer a signal representing information regarding the bidding process;
- b) receiving bids submitted by a plurality of bidders, each bid indicating a quantity of the items that a bidder wishes to transact at each of at least two prices;
- c) determining at a computer whether the auction should end or continue, based on a comparison of a sum of quantities that bidders wish to transact and an available quantity of items;
- d) generating at a computer updated information regarding the bidding process; and
- e) initiating at a computer at least one additional opportunity for bidders to submit bids following a determination that the auction should continue.

Claim 175 (new) The method of claim 174 wherein the updated information regarding the bidding process includes the bid history.

Claim 176 (new) The method of claim 175 wherein the bid history includes the disaggregated quantities that bidders wish to transact.

Claim 177 (new) The method of claim 175 wherein the bid history includes a sum of quantities that bidders wish to transact.

Claim 178 (new) A system comprising at least one computer for implementing an auction of a plurality of items, the auction allowing submission of bids on the items at a plurality of times, the system comprising:



Application No.: 09/397,008

a) transmitting means for transmitting a signal representing information regarding the bidding process;

- b) receiving means for receiving bids submitted by a plurality of bidders, each bid indicating a quantity of the items that a bidder wishes to transact at each of at least two prices;
- c) determining means for determining whether the auction should end or continue, based on a comparison of a sum of quantities that bidders wish to transact and an available quantity of items;
- d) generating means for generating updated information regarding the bidding process; and
- e) initiating means for initiating at least one additional opportunity for bidders to submit bids following a determination that the auction should continue.

 $\mathcal{Q}_{\!\!\!/}$

Claim 179 (new) The system of claim 178 wherein the updated information regarding the bidding process includes the bid history.

Claim 180 (new) The system of claim 179 wherein the bid history includes the disaggregated quantities that bidders wish to transact.

Claim 181 (new) The system of claim 179 wherein the bid history includes a sum of quantities that bidders wish to transact.

Claim 182 (new) A method for using at least one computer to implement an auction of a plurality of items, the auction allowing submission of bids on the items at a plurality of times, the method comprising:

- a) receiving bids submitted by a plurality of bidders, each said bid received at a computer and including transaction curve information from a bidder; and
- b) generating signals, each said signal generated at a computer and representing the transaction curve information from a bidder corresponding to a current price.

Docket No.: 21736-00012-US

Claim 183 (new) The method of claim 182 further including the step of limiting the transaction curve information from a bidder corresponding to a current price to be no greater than the transaction curve information from the bidder corresponding to the immediately preceding price.

Claim 184 (new) A computer system for implementing an auction of a plurality of items, the auction allowing submission of bids on the items at a plurality of times, the computer system comprising:

- a) receiving means for receiving bids submitted by a plurality of bidders, said bids including transaction curve information from the plurality of bidders; and
- b) generating means for generating signals, said signals representing the transaction curve information from the plurality of bidders corresponding to a current price.

Claim 185 (new) The system of claim 184 further including limiting means for limiting the transaction curve information from a bidder corresponding to a current price to be no greater than the transaction curve information from the bidder corresponding to the immediately preceding price.